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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Zahm, et al.

Serial No.: 09/585,192

Filed: June 1, 2000

For: METHODS AND APPARATUS FOR MEASURING
NAVIGATIONAL PARAMETERS OF A
LOCOMOTIVE

Group Art Unit: 3661

Examiner: B. Broadhead

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Respectfully submitted,

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REQUEST FOR RECONSIDERATION AFTER FINAL

Commissioner for Patents
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Washington, D.C. 20231

Sir:

In response to the Office Action dated June 18, 2002 and made final, in accordance with 37 C.F.R. Section 1.116, Applicants respectfully request consideration of the following remarks.

REMARKS

The Office Action mailed June 18, 2002 has been carefully reviewed and the following remarks are made in consequence thereof.

Claims 1-31 are now pending in this application. Claims 1-31 stand rejected.

The rejection of Claims 1-3, 15-17, 30, and 31 under 35 U.S.C. § 102(e) as being anticipated by Lightsey (U.S. Patent No. 6,005,514) is respectfully traversed.

Lightsey describes a method for vehicle roll, pitch, and azimuth attitude determination using GPS carrier phase measurements from nonaligned antennas. The method includes determining S10 the configuration of GPS patch antennas 10 on a vehicle 52, that includes master and slave antennas. Antenna reference frames are then measured S12 and carrier signals are received S14 by each antenna. For each set of carrier signals, a corrected, differential carrier phase is then determined S14. The corrected differential carrier phase measurements, along with other necessary inputs, are then used with conventional methods to

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